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New 'chip' will offer amazing performance

Sometime in the next few months, the first personal computers will become available with a new "chip," a microprocessor known as the Intel 80386, or "386" for short. This new chip will offer speed and performance unlike anything you've seen.

Compaq announced the first personal computer using the 386 just last week, but volume shipments aren't expected until early 1987. And other computer companies are now readying their own versions for release before year-end.

The computer industry has been buzzing about the new chip for months, so last week's announcement by Compaq was not a surprise. The big question, however, is the timing of IBM's announcement of its new personal computer that uses the 386.

By some accounts, the new chip will drive a PC three to five times faster than IBM's top-of-the-line personal computer, the IBM PC-AT. This translates to 6 to 10 times faster than a normal IBM PC. Not only that, the new computers incorporating the 386 will provide multitasking capability that will rival minicomputers currently costing \$20,000 to \$30,000, and will be priced from \$5,000 to \$8,000. Now, that's a breakthrough.

In light of this development, good questions to ask are: How prudent is it to now invest in computer equipment that uses the 80286 — The older Intel chip that's in the IBM PC-AT and has just been released by IBM in a version of the XT called the XT-286? Or the 8088, the even older chip that's still supplied in regular PCs? And, should all PC purchases be delayed until the 386 becomes available?

Especially for those who think of themselves as "power users," these are valid questions. And for large companies that have dozens or hundreds of PCs, it is also important. After all, you don't want to lock yourself into older, slower machines right before faster new ones are about to be released.

In these cases, I would suggest

that you now rent or lease computers to cover your day-to-day needs until the new machines become available. It does not make sense to buy top-of-the-line AT-type computers today if the top of the line will be different tomorrow.

For most other business users of

personal computers, however, there is less to be concerned about. In fact, the introduction of machines based on the 386 may provide an indirect benefit for those who don't buy them. With each major advance in computer technology — and the 386 is definitely a major advance — the prices will fall farther

for the older technology. So most buyers benefit in the short term.

IBM has yet to introduce a machine with the new chip, and judging from the speed with which IBM normally moves, volume shipments of the IBM version are probably a year or more in the future. Also, standard operating system software will probably wait until then.

The PC marketplace today resembles the situation in 1980, before IBM stepped in with the IBM PC in 1981. Dozens of other companies had already proven that there was an active and profitable market, and the CPM operating system was considered the standard at the time. Then IBM introduced the IBM PC along with a new operating system, MS-DOS, and set a new standard.

I predict that IBM will again set the standard with a 386-based machine that eventually will replace its current PC line, and that a new operating system will probably emerge as well.

Unless you are a "power user" or a large company seeking high-performance PCs for networks or minicomputer applications, steer clear of the new 386 machines for the next 6 to 12 months.

In the interim, take advantage of the falling prices on the IBM PC family of computers and all the PC-compatibles.



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